### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jung-Keun Kim et al.	) Group Art Unit: 1623
Application Serial No.: 10/568,257	) Examiner: ISSAC, ROY I
Filed: 02/13/2006	) Confirmation No.: 9671
For: COMPOSITION COMPRISING NOTOGINSENG RADIX EXTRACT FOR PREVENTING AND TREATING OF ARTHRITIS AS AN EFFECTIVE INGREDIENT	) ) )

# AMENDMENT AND RESPONSE TO OFFICE ACTION UNDER 37 C.F.R. 1.111

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated February 14, 2007 in connection with the aboveidentified application, please enter and consider the following amendment and remarks:

### In the claims:

Please cancel claims 1-5 without prejudice. Please add new claims 6-12 as shown below.

Claims 1-5. (Canceled)

Claim 6. (New) A method of treating arthritis in an animal comprising administering to the animal a therapeutically effective dose of a composition comprising a butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and ethanol.

Claim 7. (New) A pharmaceutical composition for treating arthritis comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and ethanol.

Claim 8. (New) The pharmaceutical composition for treating arthritis according to claim 7, wherein the pharmaceutical composition is in the form of powders, tablets or capsules.

Claim 9. (New) A health food composition comprising a composition comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and ethanol.

Claim 10. (New) The health food composition according to claim 9, wherein the health food composition is in a form of foodstuff selected from the group consisting of cooking spices,

tomato ketchup, flour food, processed meats, noodle soups, gravies, ground beef, dairy products and sunsik.

Claim 11. (New) The health food composition according to claim 9, wherein the health food is in a form of beverages selected from the group consisting of carbonated beverages, health beverages, vegetable juice and fruit juice.

Claim 12. (New) The method according to claim 6, wherein the animal is human.

### **REMARKS**

Claims 6-12 are pending in the application. Support for new claims 6-11 can be found throughout the specification. In particular, support for new claims 6 and 12 can be found at pages 25-29 in the specification. Support for new claim 7 can be found at page 19 in the specification. Support for new claim 8 can be found at pages 13 and 30-31 in the specification. Support for new claim 9 can be found at page 11 in the specification. Support for new claims 10 and 11 can be found at pages 31-34 and 34-35, respectively, in the specification. Accordingly, no new matter has been inserted into the application.

### **Objection**

Claims 4 and 5 have been objected to because the phrase "any one" is misspelled as "anyone". Claims 4 and 5 have been canceled and the presently pending claims do not recite "anyone."

Accordingly, this objection has been overcome.

### Rejection Under 35 U.S.C. §112, First Paragraph

Claims 1-5 have been rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

The Examiner states that the specification is enabling for treating arthritis. However, the Examiner states that the specification does not reasonably provide enablement for the prevention of arthritis. Although Applicants do not agree with the Examiner, Applicants note that currently pending claims are directed to treating arthritis. Thus, Applicants submit that the

present application provides a fully enabling description of the presently claimed invention.

Accordingly, it is believed that this rejection has been overcome.

### **Rejection Under 35 U.S.C. §102(b) over Lin (CN 14188690A)**

Claims 1-5 have been rejected under 35 U.S.C. §102(b) as being anticipated by Lin. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

### Presently claimed invention

The presently claimed invention is directed to compositions comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water, and a method of treating arthritis by administering the composition to a subject.

### Lin

Lin discloses a composition extracted from notoginseng by ethyl alcohol and n-butanol. However, Lin fails to disclose or suggest compositions comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and a method of treating arthritis by administering the composition to a subject as in the presently claimed invention.

### Distinctions of the presently claimed invention over Lin

Lin discloses a composition comprising ethanol and butanol extract of a root of *Notoginsent radix* and the use of the composition for preventing and curing angiocardiopathy and cerebrovascular disease.

However, the presently claimed invention is directed to a composition comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive composition to treat arthritis. Therefore, Lin fails to disclose or suggest a composition comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive composition to treat arthritis as in the presently claimed invention. Accordingly, Lin fails to anticipate the presently claimed invention.

## Rejection Under 35 U.S.C. §102(b) over Cui (CN 1348796A)

Claims 1-5 have been rejected under 35 U.S.C. §102(b) as being anticipated by Cui. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

### Cui

Cui discloses a composition prepared by extracting various plants including radix notoginseng by using ethyl alcohol and then adding boneol into the extract. However, Cui fails to disclose or suggest compositions comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and a method of treating arthritis comprising administering the composition to a subject as in the presently claimed invention.

### Distinctions of the presently claimed invention over Cui

Cui discloses a pain treating composition prepared by first extracting various plants.

However, the presently claimed invention is directed to a composition comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive composition to treat arthritis. Therefore, Cui fails to disclose or suggest a composition

comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive composition to treat arthritis as in the presently claimed invention. Accordingly, Cui fails to anticipate the presently claimed invention.

### Rejection Under 35 U.S.C. §102(b) over Liu (U.S. Patent No. 4,755,504)

Claims 1-5 have been rejected under 35 U.S.C. §102(b) as being anticipated by Liu. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

### Liu

Liu discloses a composition containing saponin (80-95.5 wt%) and quercetin (0.5-20 wt%), derived from root Tienchi, the Chinese name of *Panax notoginseng*. However, Liu fails to disclose or suggest compositions comprising butanol fraction of extract of *Notoginseng radix* extracted by water, ethanol or a mixed solvent of water and a method of treating arthritis by administering the composition to a subject as in the presently claimed invention.

#### Distinctions of the presently claimed invention over Liu

Liu discloses a composition containing saponin and quercetin, derived from Tienchi.

Apparently, the composition of Liu is effective in treatment of circulatory disease.

However, the presently claimed invention is directed to a composition comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive composition to treat arthritis. Therefore, Liu fails to disclose or suggest a composition comprising butanol fraction of extract of *Notoginseng radix* and a method of using the inventive

composition to treat arthritis as in the presently claimed invention. Accordingly, Liu fails to

anticipate the presently claimed invention.

**Conclusion** 

It is believed that the application is now in condition for allowance. Applicant requests

the Examiner to issue a notice of Allowance in due course. The Examiner is encouraged to

contact the undersigned to further the prosecution of the present invention.

The Commissioner is authorized to charge JHK Law's Deposit Account No. 502486 for

any fees required under 37 CFR §§1.16 and 1.17 that are not covered, in whole or in part, by a

credit card payment enclosed herewith and to credit any overpayment to said Deposit Account

No. 502486.

Respectfully submitted,

**JHK Law** 

Dated: May 8, 2007

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